

**SOUND TRANSIT  
STAFF REPORT**

**MOTION NO. M2009-67**

**North Link and University Link Light Rail Vehicle Storage Yard Expansion Contract**

<b>Meeting:</b>	<b>Date:</b>	<b>Type of Action:</b>	<b>Staff Contact:</b>	<b>Phone:</b>
Finance Committee	8/6/09	Discussion/Possible Action to Recommend Board Approval	Ahmad Fazel, Link Executive Director	(206) 398-5389
Board	8/13/09	Action	<b>Joe Gildner, University Link Project Director</b> George Hodges, Civil/Systems Integration Manager	<b>(206) 689-3350</b> (206) 398-5473

<b>Contract/Agreement Type:</b>	<input checked="" type="checkbox"/>	<b>Requested Action:</b>	<input checked="" type="checkbox"/>
Competitive Procurement	<input checked="" type="checkbox"/>	Execute New Contract/Agreement	<input checked="" type="checkbox"/>
Sole Source	<input type="checkbox"/>	Amend Existing Contract/Agreement	<input type="checkbox"/>
Agreement with Other Jurisdiction(s)	<input type="checkbox"/>	Budget Amendment	<input type="checkbox"/>
Real Estate	<input type="checkbox"/>	Property Acquisition	<input type="checkbox"/>

**PROJECT NAMES**

North Link – Northgate to 45<sup>th</sup> Street, North Link – UW Station to Brooklyn Station (at NE 45<sup>th</sup> Street), and University Link – Pine Street Stub Tunnel (PSST) to University of Washington (UW) Station

**PROPOSED ACTION**

Authorizes the chief executive officer to execute a contract with Railworks Track Systems, Inc. to provide construction services to expand the vehicle storage yard at the Link light rail Operations and Maintenance Facility for North Link and University Link projects in the amount of \$11,150,000, with a contingency of \$1,115,000 for a total authorized contract amount not to exceed \$12,265,000.

**KEY FEATURES of PROPOSED ACTION**

The scope of work for the light rail vehicle (LRV) storage yard expansion (Contract U820) includes:

- Expanding the vehicle storage yard to its full capacity by constructing nine additional LRV storage tracks and expanding the overhead contact system poles and wire at the Link Operations and Maintenance Facility (OMF).
- Expanding storage yard signal system to support the additional tracks.
- Installing a dust-free automated sand dispensing system. The automated dust-free sanding system will provide a safe, cost effective, and reliable method of filling LRV sand boxes located at eight positions over the powered axles along the exterior of the car body.
- Installing door-bridge alarms at roll-up door locations to prevent damage to the LRV pantographs (voltage distribution appendage) and carbons (element in the pantograph that makes contact with the overhead contact system).
- Testing support to the signals system (Contract C802) contractor, who will be conducting work in support of this yard expansion in the north and south signal houses.

- Staff recommends assignment of \$1,115,000, or 10% contingency for this contract. This recommended contingency amount is based on the determination by staff that this contract has low to medium risk based on the need to carefully coordinate construction activity within an active yard and with the operational needs of King County Metro, under contract to Sound Transit for the operation and maintenance of Link light rail service and facilities including the OMF.

**BUDGET IMPACT SUMMARY**

Current Project Phase: Construction  
 Projected Completion Date: 2016

<b>Action Outside of Adopted Budget:</b>	<b>✓</b>	<b>Comments on Checked Items</b>
This Project		
This Phase	✓	<p>Within the North Link – Northgate to 45<sup>th</sup> St project, the proposed action to increase the construction phase budget will require funding from project contingency and surplus budget within other phases of the project.</p> <p>Within the North Link – UW Station to Brooklyn Station project, the proposed action will require funding from unallocated contingency within the construction phase.</p> <p>Within the University Link project, the proposed action will require funding from surplus budget within other construction phase line items.</p>
This Task		
Budget Amendment Required		
<b>Key Financial Indicators:</b>	<b>✓</b>	<b>Comments on Checked Items</b>
Contingency Funds Required		
Funding required from other parties (other than what is in financial plan)		

Not checked = action is assumed in current Board-adopted budget. No budget action or adjustment to financial plan required.

**BUDGET and FINANCIAL PLAN DISCUSSION**

The proposed action would authorize a not to exceed contract value for Railworks Track Systems, Inc. in the amount of \$12,265,000, and include: North Link – Northgate to 45<sup>th</sup> Street project in the amount of \$1,255,605; North Link – UW Station to Brooklyn Station project in the amount of \$4,507,477; and University Link project in the amount of \$6,501,918.

The Adopted 2009 Lifetime Capital Budget for the North Link – Northgate to 45<sup>th</sup> Street project is \$19.5 million.

- No budget was established for the construction phase. A commitment of \$345,000 for OMF Yard Expansion was previously authorized by the Sound Transit Board (Motion No. M2009-12, approved 4/23/09). The proposed action would increase this amount by \$1,255,605 to a revised total commitment of \$1,600,605. Budget for this line item will be funded in the amounts of \$332,001 from project contingency and \$923,604 from surplus budget within other phases of the project.
- \$677,001 has been set aside for project contingency. Of this amount, \$345,000 was used to fund the previously approved board motion. The proposed action uses the remaining \$332,001, and leaves no project contingency.

The Adopted 2009 Lifetime Capital Budget for the North Link – UW Station to Brooklyn Station project is \$26.4 million. Within that amount:

- \$5,000,000 has been set aside for OMF Yard Expansion in the construction phase. A commitment of \$600,000 for this budget line item was previously authorized by the Sound Transit Board (Motion No. M2009-12, approved 4/23/09). The proposed action would increase this amount by \$4,507,477 to a revised total commitment of \$5,107,477, and result in a budget shortfall of \$107,477, which will be funded from unallocated contingency within the construction phase.
- \$500,000 has been set aside for unallocated contingency within the construction phase. The proposed action would use \$107,477 of this amount, and leave a remaining balance of \$392,523.

The Adopted 2009 Lifetime Capital Budget for the University Link project is \$1.756 billion. Within that amount:

- \$7,013,000 has been set aside for the OMF Yard Expansion in the construction phase. A commitment of \$1,155,000 for this budget line item was previously authorized by the Sound Transit Board (Motion No. M2009-12, approved 4/23/09). The proposed action would increase this amount by \$6,501,918 to a revised total commitment of \$7,656,918, and result in a budget shortfall of \$643,918, which will be funded from surplus budget within other construction phase line items.

The proposed action is within the current adopted budget and is affordable within the agency's long-term financial plan and subarea financial capacity. The action will have no new revenue impact on Sound Transit. The phase amounts in the proposed action are consistent with a proposed 2009 ST2 Budget Amendment, currently under development.

## BUDGET TABLE

**Action Item:** RailWorks Track Systems, Inc. (provide construction services to expand the vehicle storage yard at the Link light rail Operations and Maintenance Facility for North Link and University Link projects)

(Year of Expenditure \$000)

<b>Total Project / Construction Phase Budget</b>	Adopted 2009 Budget (A)	Committed To Date (B)	This Action (C)	Total Committed & Action (D)	Uncommitted (Shortfall) (E)
North Link-Northgate to 45th Street Construction Phase	19,548 -	17,365 345	1,256 1,256	18,621 1,601	927 (1,601)
North Link-UW Station to Brooklyn Station Construction Phase	26,444 6,844	20,309 1,944	4,507 4,507	24,817 6,451	1,627 393
University Link Construction Phase	1,756,007 1,180,033	812,255 377,724	6,502 6,502	818,757 384,226	937,250 795,807
<b>Total Link</b>	<b>1,801,999</b>	<b>849,929</b>	<b>12,265</b>	<b>862,194</b>	<b>939,805</b>
<b>Total Construction Phase</b>	<b>1,186,877</b>	<b>380,013</b>	<b>12,265</b>	<b>392,278</b>	<b>794,599</b>

<b>Contract Value</b>	Board Approvals to Date (F)	Current Approved Contract Value (G)	Proposed Action (H)	Proposed Total for Board Approval (I)	Proposed Contract Value (J)
Contract - North Link - Northgate to 45th St	-	-	1,158	1,158	1,158
Contract - North Link - UW Station to Brooklyn Station	-	-	4,103	4,103	4,103
Contract - University Link	-	-	5,889	5,889	5,889
<b>Total Contract</b>	-	-	<b>11,150</b>	<b>11,150</b>	<b>11,150</b>
Contingency - North Link - Northgate to 45th St	-	-	98	98	98
Contingency - North Link - UW Station to Brooklyn Station	-	-	404	404	404
Contingency - University Link	-	-	613	613	613
<b>Total Contingency</b>	-	-	<b>1,115</b>	<b>1,115</b>	<b>1,115</b>
<b>Total</b>	-	-	<b>12,265</b>	<b>12,265</b>	<b>12,265</b>
Percent Contingency	0%	0%	10%	10%	10%

### Budget Shortfall

<b>Task Level</b>	\$Amount (K)	Potential Resources (L)	Source (M)
<i>North Link - Northgate to 45th St</i>			
U820 O&M Facility Yard Expansion - This Action	924	927	Surplus budget within other phases
U820 O&M Facility Yard Expansion - This Action	332	677	Project Contingency
Yard Expansion - Signal System - Prior Action	345		
<b>Total Construction Phase Budget Shortfall</b>	<b>1,601</b>	<b>1,604</b>	<b>TOTAL Project</b>
<i>North Link - UW Station to Brooklyn Station</i>			
O&M Facility Yard Expansion	107	500	Unallocated contingency within the construction phase
<i>University Link</i>			
O&M Facility Yard Expansion (U820, Signals)	644	761,805	Surplus budget within other construction phase line items

## SMALL BUSINESS PARTICIPATION

### Prime Contractor

Railworks Track Systems, Inc. is the prime contractor for this contract. Railworks Track Systems, Inc. is committed to a 16.47% Small Business Commitment with 15.34% DBE participation. Sound Transit's small business goal is 12%, with a DBE goal of 10%.

### Utilization Breakdown Table

<b>Subconsultant/Subcontractor</b>	<b>Business Type</b>	<b>% of Work</b>	<b>Dollar Value</b>
EIR Electric, Inc.	WBE / DBE	8.07%	\$900,000
B&B Diversified Materials	MWBE / DBE	7.05%	\$786,277
Kulchin Foundation Drilling	Small Business	.98%	\$109,000
Otto Rosenau & Associates	Small Business	.16%	\$17,500
Coats Surveying	DBE	.22%	\$24,000
<b>Total</b>		<b>16.47%</b>	<b>\$1,836,777</b>

### Equal Employment Workforce Profile (% Women/People of Color)

Railworks Track Systems, Inc. workforce demographics are 5.06% women and 40.5% people of color in its regional office.

### Apprentice Utilization Commitment

Railworks Track Systems, Inc. has committed to hiring apprentices for 20.57% of all labor hours.

### **PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION**

The University Link project was granted permission to enter final design from the Federal Transit Administration (FTA) on December 11, 2006.

Final Systems design for the University Link project began after the Board authorized execution of a contract with LTK Engineering Services on May 10, 2007 to provide systems engineering final design services.

On March 24, 2009, Sound Transit advertised this contract as a competitive procurement through local and regional publications and received five bids on May 22, 2009. Railworks Track Systems, Inc. was determined to be lowest responsive and responsible bidder. Railworks' bid is \$11,150,000 which is 14% above the Link Engineer's Estimate of \$9,804,000. The highest bid was 34% above the Link Engineer's Estimate.

The Engineer's Estimate reflects the trend of lower bids received for other recent U-Link construction contracts given the current competitive bidding climate. However, in this particular case the market consistently placed a higher value on the scope of this construction. Staff will continue to monitor relevant construction indices, trends, and other factors in the preparation of future estimates, and make adjustments accordingly.

The U820 contract scope consists of construction of nine additional storage tracks with the capacity to store an additional 64 light rail vehicles. By adding to the existing storage yard capacity of 40 LRVs, this modification will result in a total storage yard capacity of 104 LRVs. This modification will support the expanded LRV fleet needed for the University Link extension to the University of Washington (27 LRVs have been ordered from Kinkisharyo/Misui) and for future LRV procurement for North Link and long-term system ridership growth.

The nine additional LRV storage tracks total 10,166 feet in length, and include ties and ballast east of the existing storage tracks previously constructed for the Initial Segment and Airport Link LRV fleet. Site-work such as grading, paving, and drainage is included in this contract. There will be seventeen new turnouts. The overhead contact system (OCS) and train signals system will be expanded for the added tracks and includes signal system cable troughs, conduits, and handholes; OCS poles and foundations; and other related structures. Fifteen Operations & Maintenance Facility door bridge alarms will also be installed.

During the design process of this LRV storage yard expansion project, Sound Transit and LTK worked in close coordination with Link Operations and King County Metro staff. A number of interface and coordination meetings were conducted to determine the optimal engineering solution and to ensure that construction activities did not adversely affect the operation of the yard during revenue service. Project staff also concluded that cost efficiencies and operational flexibility benefits could be achieved by completing the full build-out of the storage yard and other improvements in a single contract now, rather than postponing the construction of the remaining storage tracks needed for North Link and other work to a later date.

The physical construction work is scheduled to begin no later than September 2009 and end in the third quarter of 2010, in time for the arrival of the 27 additional University Link LRVs, now in production.

Environmental compliance for University Link and North Link pursuant to the National Environmental Policy Act (NEPA) and State Environmental Policy Act (SEPA) was completed with the North Link Final Supplemental Environmental Impact Statement (EIS) issued on April 7, 2006. The Federal Transit Administration issued a Record of Decision in June 2006.

**Prior Board/Committee Actions on this Project and Relevant Board Policies**

<b>Motion/Resolution Number and Date</b>	<b>Summary of Action</b>
R2008-09 7/24/08	Approval of Revised University Link Baseline Cost Estimate (BCE) and Authorizing Submission of Revised Federal Full Funding Grant Agreement Application

**CONSEQUENCES of DELAY**

Delay in awarding this contract would jeopardize completing the yard expansion in time for receipt of the initial University Link LRVs scheduled for delivery in late October 2010. The expanded yard is necessary for the storage of these additional LRVs.

**PUBLIC INVOLVEMENT**

Not applicable to this action.

**ENVIRONMENTAL COMPLIANCE**

Jl, 7/17/09

**LEGAL REVIEW**

LA 7/30/09

## SOUND TRANSIT

### MOTION NO. M2009-67

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract with Railworks Track Systems, Inc. to provide construction services to expand the vehicle storage yard at the Link light rail Operations and Maintenance Facility for North Link and University Link projects in the amount of \$11,150,000, with a contingency of \$1,115,000 for a total authorized contract amount not to exceed \$12,265,000.

#### **Background:**

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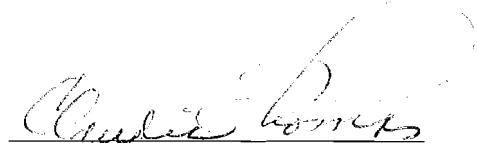
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**Motion:**

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract with Railworks Track Systems, Inc. to provide construction services to expand the vehicle storage yard at the Link light rail Operations and Maintenance Facility for North Link and University Link projects in the amount of \$11,150,000, with a contingency of \$1,115,000 for a total authorized contract amount not to exceed \$12,265,000.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on August 13, 2009.

  
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Claudia Thomas  
Board Vice Chair

ATTEST:

  
\_\_\_\_\_  
Marcia Walker  
Board Administrator